

DOLINSKIY, Yu.I., inzh.; BAKHAREV, V.M., inzh.; ALEKSEYEV, V.N.,
arkhitektor; KOLCHANOV, L.I., arkhitektor

Crushed colored glass finish of keramzit-concrete wall panels,
Stroi. mat. 10 no.3:18-20 Mr '64. (MIRA 17:6)

TARNOVSKIY, I.Ya.; CANAGO, O.A.; BAGROV, I.N.; SHELEIKHOV, V.A.; Prinimali
uchastiye: MAKAYEV, S.V.; inzh.; RYABOKON', N.K., inzh.; KOTEL'NIKOV,
O.V., inzh.; PUCHKOV, S.O., inzh.; STAROSIELTSKIY, M.I., inzh.;
BAKHAREV, V.P., tekhnik.

Developing a technology for the manufacture of lightweight railroad
car wheels. Kuz.-shtam. proizv. l no.9:1-4 S '59.

(MIRA 12:12)

(Car wheels) (Forging)

ASSISTANT SECRETARY OF STATE

CC: [REDACTED] - Some information contained herein may be
classified. [REDACTED]

Subject: A.N. Karassik - Institute of Physics and
Technology

Code: 1 2

1. 1. 1. 6
N. C. S. S. S.

Bonded ionogenic groups; thus, sulfonation yields highly acidic monofunctional membranes.
The electrical resistance increases with increasing crosslinking.

The latter are recommended for electrodialysis, but a lower degree of crosslinking is
needed for membranes used in ultrafiltration. Orig. art. has 4 figures.

1. 1. 1. 6
N. C. S. S. S.

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF Sov: 004

OTHR: 000

Card 2/2

USSR/Soil Science - Soil Genesis and Geography.

J

Abs Jour : Ref Zhur Biol., No 19, 1958, 86720

Author : Bakhareva, A.

Inst :

Title : Simple and Improved Drafting of Soil Maps.

Orig Pub : s. kh. Sibiri, 1958, No 3, 28-29

Abstract : No abstract.

Card 1/1

URKHOVICH, D. M.

✓ Differential polarographic titration. N. Ya. Ellinger,
L. G. Gubin, and A. A. Blazhnev (USSR) 1954. *V. Khimicheskaya Laboratoriya*, No. 18 (1955). The results of polarographic titration are described. The apparatus differential polarography consists of 2 Pt wire electrodes connected in the usual polarographic circuit, across which is connected an opposed source of p.d., this circuit carrying a high resistance (22 megohms). After initial balancing, the titration is run conveniently, the galvanometer being balanced to zero after each addin of the reagent. The range of the opposed voltage must be wide enough initially for the first few results of each titration, or current values will be determined at the respective points.

RM 32

KHLOPIN, N.Ya.; BAKHAREVA, A.A.

Behavior of pyramidon under conditions of polygraphic differential titration. Trudy Perm. farm. inst. no.1:138-141 '59. (MIRA 15:1)

1. Permskiy farmatsavticheskij institut, kafedra neorganicheskoy i analiticheskoy khimi. (AMINOPYRINE) (POLAROGRAPHY)

TURINTSEV, Iu.I.; ZOBNIK, V.I.; BAKHAREVA, G.P.

Effect of blasting on the stability of open pit walls. Bezop.
truda v prom. 5 no.4:6-9 Ap '61. (MIRA 14:3)

1. Unipromed'.
(Blasting)

TURINTSEV, Yu.I., inzh.; ZOBIN, V.I., inzh.; BAKHAREVA, G.P., inzh.

Study of the stability and determination of safe angles of levelled-off sides of the Bilyava open-pit mine. Izv.vys.ucheb.zav.; gor.zhur. 5 no.2:97-101 '62. (MIRA 15:4)

1. Ural'skiy nauchno-issledovatel'skiy i proyektnyy institut
mednoy promyshlennosti.
(Bilyava region-Strip mining) (Blasting)

USSR/ Chemistry Kinetics theory

Card : 1/1

Authors : Stepukhovich, A. D., and Bakhareva, I. F.

Title : The kinetics theory of two successive one-sided reaction of different order

Periodical : Zhur. fiz. khim. 28, Ed. 6, 970 - 975, June 1954

Abstract : An accurate solution to the kinetic problem of two one-sided successive reactions of different order was obtained through integration of differential equations applicable to the rate of such reactions. It was established that two successive reactions of different order, at a certain constant ratio, can take place either in accordance with the bi- or mono-molecular law. Final terms for the calculation of changes occurring during the concentration of basic substances, intermediate and final products, are presented. Four USSR references. Graph.

Institution : The N. G. Chernishevskiy State University, Saratov

Submitted : November 22, 1953

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000103110008-7

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000103110008-7"

STEPUKHOVICH, A.D.; BAKHAREVA, I.F.

Reply to the remarks of Iu.S. Saiasov. Zhur.fiz.khim. 30 no.6:
1407-1409 Je '56. (MLRA 9;10)

1. Saratovskiy gosudarstvennyy universitet imeni
N.G. Cheryshevskogo.
(Chemical reaction, Rate of) (Saiasov, Iu.S.)

S/020/60/135/002/023/036
B004/B056

AUTHOR: Bakhareva, I. F.

TITLE: Nonlinear Thermodynamics of Irreversible Processes

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 2,
pp. 350-353

TEXT: The author aimed at deriving equations for thermodynamic processes, which hold not only, like ordinary linear equations, near equilibrium. It was found that extending the linear equations over the entire range of kinetics of a reaction (beginning from $t = 0$) leads to nonlinear inter-relations. The Onsager function is written:

$\dot{x}_i = \sum_k^n L_{ik} x_k$, $i = 1, 2, 3 \dots n$ (1), where $x_1, x_2 \dots x_n$ are the thermo-

dynamic parameters, that characterize the deviation of the system from equilibrium. L_{ik} are the kinetic coefficients, x_k is the thermodynamic

Card 1/3

Nonlinear Thermodynamics of Irreversible
Processes

S/020/60/135/002/023/036
B004/B056

force: $x_k = \partial(-\Delta S)/\partial x_k$ (3) (adiabatic course of the reaction).

ΔS - deviation of entropy from equilibrium). In first approximation, the expression for x_k is used in consideration of the terms of second order with respect to ΔS in the thermodynamics of irreversible processes, so that x_k too is linear:

$$x_k = \sum_i^n g_{ik} x_i; k = 1, 2, \dots, n \quad (4)$$

Equation (1) therefore has the form:

$\dot{x}_i = \sum_{k,l}^n L_{ik} g_{il} x_l; i = 1, 2, \dots, n \quad (6)$. If in the expansion of ΔS also the terms of third order are taken into account, one obtains the equation

$$x_k = \sum_i^n g_{ik} x_i + (1/2) \sum_{i,l}^n m_{ikl} x_i x_l \quad (12)$$

and a system of nonlinear

$$\text{equations } \dot{x}_i = \sum_{k,m}^n L_{im} g_{ik} x_k + (1/2) \sum_{m,l,k}^n L_{im} m_{ikl} x_i x_l \quad (6')$$

This system has

Card 2/3

Nonlinear Thermodynamics of Irreversible
Processes

S/020/60/135/002/023/036
B004/B056

a more general validity, because it describes the entire kinetics of processes for which the system of equation (1) holds only near equilibrium. The author thanks A. D. Stepukhovich for a discussion. There are 3 Soviet references.

ASSOCIATION: Saratovskiy gosudarstvennyy universitet im. N. G. Chernyshevskogo (Saratov State University imeni N. G. Chernyshevskiy)

PRESENTED: May 28, 1960 by V. N. Kondrat'yev, Academician

SUBMITTED: May 26, 1960

Card 3/3

BAKHAREVA, I. F.; KRYLOV, A. F.

Linearization of the differential equations for the kinetics
of reversible chemical reactions. Zhur. fiz. khim. 36 no.12:
2659-2666 D '62. (MIRA 16:1)

1. Saratovskiy gosudarstvennyy universitet imeni Chernyshevskogo.
(Chemical reaction, Rate of)

VLASOVA, K.N.; CHUDINA, L.I.; ZAVEL'GEL'SKIY, L.M.; GULYAYEVA, S.I.; BAKHAREVA,
L.T.

Use of thermoplastic glue based on low-molecular polyamide resins in
shoe manufacture. Kozh.-obuv. prom. 6 no.8:30-31 Ag '64.
(MIRA 17:10)

<p>✓ B. A. Гурин, ✓ B. B. Насилько</p> <p>О прохождении стационарной зоны турбулентности в зоне устойчивости отрывного зазора при турбулентном обтекании</p> <p>✓ B. B. Гурин, ✓ B. B. Насилько, ✓ T. F. Гусаков</p> <p>Форма распространения зоны отрывка волнистого отрывного зазора</p> <p>10 зон (с 10 до 18 часов)</p> <p>✓ B. B. Гурин, ✓ B. B. Багуров</p> <p>Характер изменения зон турбулентности волнистого отрывного зазора</p> <p>✓ B. B. Гурин, ✓ B. B. Кузнецова, ✓ С. О. Веретен</p> <p>Соответствие результатов наблюдения за зонами в зоне турбулентности с зонами</p> <p>✓ B. B. Гурин, ✓ С. О. Веретен,</p> <p>91</p>	<p>✓ B. B. Гурин, ✓ B. B. Кузнецова</p> <p>О фазовом и спектральном составе, параметрах и характеристиках зон турбулентности волнистого отрывного зазора</p> <p>✓ B. B. Гурин, ✓ B. B. Кузнецова, ✓ T. A. Голуб</p> <p>Соответствие гидравлического рисунка отрывного зазора и спектрального анализа</p> <p>10 зон (с 10 до 22 часов)</p> <p>✓ B. A. Вергунова</p> <p>Расчет зависимости зоны волнистого отрывного зазора</p> <p>✓ B. F. Шишков</p> <p>Графоаналитический метод расчета зоны отрывного зазора для различных режимов работы</p> <p>91</p>
--	--

report submitted for the Technical Meeting of the Scientific Technological Society of
Radio Engineering and Electrical Communications by A. S. Popov (VNIIT), Moscow,
8-12 June, 1959

AUTHOR: Bakhareva, M.F.

SOV/109-4-1-12/30

TITLE: Correlation Between the Waves of Various Frequencies,
After Their Passage Through a Layer of Statistically
Non-uniform Medium (Korrelyatsiya mezhdu volnami razlichnoy
chastoty, proshedshimi sloy statisticheski neodnorodnoy
sredy)

PERIODICAL: Radiotekhnika i Elektronika, 1959, Vol 4, Nr 1,
pp 88 - 96 (USSR)

ABSTRACT: The article is concerned with determining the correlation
function for the waves of two different frequencies
received at the same point. This problem is of interest in
the investigation of the ionosphere by means of two
different frequencies. It is assumed that the refractive
index of the ionosphere can be represented as
 $n = n_0(1 - \mu)$ where n_0 and μ are defined by Eqs (1).
 N in Eq (1) denotes the electron concentration in the
ionosphere, while e and m represent the charge and the
mass of an electron; ΔN is a random deviation of the
electron concentration from its average value N . The
complex phase of the wave can be represented as:

Card1/4

SOV/109-4-1-12/30

Correlation Between the Waves of Various Frequencies, After Their Passage Through a Layer of Statistically Non-uniform Medium

$$\Psi = S + i \ln A,$$

where A represents the amplitude and S the phase of the wave. If the phase change S' and the amplitude change are small, the change of the complex phase, Ψ' , can be represented by:

$$2k \frac{\partial \Psi'}{\partial x} + i\Delta\Psi' = -2\mu k^2, k = k_0 n_0 = \frac{\omega}{c} n_0 \quad (2)$$

where it is assumed that the primary plane wave propagates in the direction of axis x . For a point with co-ordinates $(L, 0, 0)$, the solution of Eq (2) is approximately given by Eq (3). By adopting the notation of Eqs (4), the phase and amplitude changes can be expressed by Eqs (5). Consequently, the phase and amplitude correlation functions are given by Eqs (8), where J_1 and J_2 are expressed by Eqs (9); the function $B(r)$

Card2/4

SOV/109-4-1-12/30

Correlation Between the Waves of Various Frequencies, After Their Passage Through a Layer of Statistically Non-uniform Medium

of Eqs (9) is defined by Eqs (7), where r is the distance between two points situated inside the integration region. If the electron concentration is described by the Gaussian law (see Eq (10)), functions J_1 and J_2 are given by

Eqs (11), where D is expressed by Eq (13). If the non-uniformities in the ionosphere are comparatively large, the factor δ in Eqs (11) is negligible and the correlation functions can be written as Eqs (14). For the same condition, the average square values of the phase and amplitude deviations are expressed by Eqs (15). Consequently, the correlation coefficients for the phase and amplitude deviations are written as Eq (16). The above analytical results relate to the fluctuations of the phases (and amplitudes) for two waves and frequencies ω_1 and ω_2 which passed through thicknesses L_1 and L_2 of the ionosphere, respectively. The accuracy of the formulae could be checked by employing the results of the experiments carried out by Gusev and Nirkotan (Ref 5).

Card3/4

The amplitude correlation coefficients obtained from

SOV/109-4-1-12/30

Correlation Between the Waves of Various Frequencies, After Their Passage Through a Layer of Statistically Non-uniform Medium

Eq (16) and from the measurements, are compared in Figures 6, 7 and 8; the circles, crosses, squares and triangles in the figures correspond to the experimental points. The author expresses his gratitude to Professor S.M. Rytov for directing this work. There are 8 figures and 6 references, 5 of which are Soviet and 1 English.

ASSOCIATION: Fizicheskiy institut im. P.N. Lebedeva AN SSSR
(Physics Institute imeni P.N. Lebedev of the A.S.S.R.)

SUBMITTED: April 10, 1957

Card 4/4

64400
64410

S/109/60/005/010/022/031
E033/E415

AUTHORS: Kinber, B.Ye. and Bakhareva, M.F.
TITLE: Reliability of a System of Diversity Reception of Two
Unequal Correlated Signals
PERIODICAL: Radiotekhnika i elektronika, 1960, Vol.5, No.10,
pp.1726-1727

TEXT: In investigations into the reliability of diversity reception of tropospheric signals, the statistics of uncorrelated and correlated signals have been examined on the assumption that the average powers of the signals in the various channels are equal. In practice, this assumption is not generally true, since the receivers and antennae are not identical. In this short communication, the distributions of the level in a system which selects the best signal from two unequal correlated relay signals is obtained. It is shown that for high reliability and not too large correlation, this system is equivalent to a system of diversity reception of two equal uncorrelated signals with small average power. The reliability $P(E > E_0)$ of a double-reception system, which selects the best signal, equals

Card 1/4

21599

Reliability of a System ...

S/109/60/005/010/022/031
E033/E415

$$P(E > E_0) = 1 - \int_0^{E_0} \int_0^{\infty} W(E_1, E_2) dE_1 dE_2, \quad (1)$$

where W is a two-dimensional distribution function. For unequal correlated relay signals the function W has the form

$$W(E_1, E_2) = \frac{E_1 E_2}{\sigma_1^2 \sigma_2^2 p^2} I_0 \left(\frac{p}{p'^2} \frac{E_1}{\sigma_1} \frac{E_2}{\sigma_2} \right) \exp \left(-\frac{E_1^2}{2\sigma_1^2 p'^2} - \frac{E_2^2}{2\sigma_2^2 p'^2} \right), \quad (2)$$

where $\sigma_i^2 = \frac{E_i^2}{2}$, $i = 1, 2$, I_0 is a Bessel function (imaginary argument), $p'^2 = 1 - p^2$, and p is related to the correlation coefficient R between the signals by the relationship

$$R = 0.921p^2 + 0.0576p^4 + 0.0144p^6 + \dots$$

It is shown that for high reliability $\left(\frac{E_0}{E}\right)^2 \ll 1$ and small
Card 2/4

*21599

S/109/60/005/010/022/031
E033/E415

Reliability of a System ...

correlation R , the distribution of unequal correlated signals can be presented in the form

$$P(E > E_0) = 1 - [1 - e^{-\frac{1}{\sqrt{1-p^2}} \frac{E_0^2}{E_1 E_2}}], \quad (10)$$

i.e. as the mutual distribution of two equal uncorrelated signals, the average power of which equals $E_1 E_2 \sqrt{1 - p^2}$. The reliability gain α of the system of two unequal correlated signals compared with a system of two equal uncorrelated signals does not depend on the reliability and equals

$$\alpha = \frac{\frac{E_1}{E}}{\frac{E_1}{\sqrt{E_1 E_2} \sqrt{1 - p^2}}}. \quad (11)$$

The dependence of α (db) on the ratio of the average levels \bar{E}_2/\bar{E}_1 (db) is shown graphically (calculated by Eq.(11) for $p = 0; 0.2; 0.4; 0.6$ and $E = E_1$). There are 1 figure and Card 3/4

21599

Reliability of a System ...

S/109/60/005/010/022/031
E033/E415

4 references: 1 Soviet and 3 non-Soviet.

SUBMITTED: May 6, 1960

Card 4/4

9.9300

26433
8/106/60/000/005/007/009
A055/A133

AUTHORS: Bakhareva, M. F.; Kinber, B. E.

TITLE: On the problem of high-directional antennae gain losses due to tropospheric scattering

PERIODICAL: Elektrosvyaz', no. 5, 1960, 67-68

TEXT: Losses called antennae gain losses arise when high-directional antennae are used for tropospheric propagation. According to Booker and de Bettencourt [Ref. 1: "Theory of radio transmission by tropospheric scattering using very narrow beams". Proc. IRE, v. 43, no. 3, 281, 1955] these losses are due to the fact that the scattering volume decreases when the antennae gain increases, whereas Mellen, Morrow, Pote, Radford and Wiesner [Ref. 2: "UNF Long-Range Communication Systems". Proc. IRE, v. 43, no. 10, 1269, 1955] attribute them to an insufficient correlation of the scattered field in the aperture of the receiving antenna. It is shown in the present article that both these causes are identical; they merely correspond to two different ways of describing the same phenomenon. The antenna gain losses are determined by

$$A = \frac{\bar{P}_{\text{dip}}}{\bar{P}_{\text{ant}}} g_{01} g_{02} \quad (1)$$

Card 1/5

26433
S/106/60/000/005/007/009
A055/A133

On the problem of high-directional ...

where \bar{P}_{ant} and \bar{P}_{dip} represent respectively the average received scatter-power for the directional and the non-directional antenna and G_{01} and G_{02} represent respectively the gain of the transmitting and the receiving antenna. A calculation of the gain-losses due to the "de-correlation" ("raskorrelirovaniye") of the field in the antenna aperture shows that the power in the receiving antenna channel can be expressed by the integral over the aperture plane:

$$\bar{P}_{ant} = \frac{1}{2} \frac{y}{\int \psi^2 ds} \times \iint \psi(s) \psi^*(s') E(s) E(s')^* ds ds', \quad (2)$$

where ψ is the field distribution in the antenna aperture plane at transmission-operation, Σ is the antenna area, y is the conductance of the medium. The field $E(s)$ is the sum of the fields scattered on the permittivity fluctuations $\Delta\epsilon$ in the scattering volume. Substituting (3) in (2), averaging for all possible $\Delta\epsilon$, transforming R_{os} as follows:

$$R_{os} = R_{os'} + |\vec{s} - \vec{s}'| \cos \psi \quad (5)$$

and supposing that

$$R_0 \approx R'_0 \approx R_1, \quad R_{os} \approx R_{o's'} \approx R_2$$

Card 2/5

26433
S/106/60/000/005/007/009
A055/A133

On the problem of high-directional ...

we obtain:

$$\begin{aligned}
 & i_{\text{ant}} = \frac{P_0 k^4 B}{(4\pi)^2} \operatorname{Re} \times \\
 & \times \iint \frac{\frac{\partial r}{\partial t} \left(\frac{\partial r}{\partial t} \right) f_n \cdot (z, \psi) f_{\text{nep}}^*(s', \psi')}{R_1^2 R_2^2} \times \\
 & \times \exp \{-ik[(R_0 - R'_0) + \\
 & + (R_{0,i} - R_{0,i'})]\} dt ds' \times \\
 & \times \iint \exp \{-ik[s - s'] \cos \varphi\} \\
 & \times \varphi(s) \varphi^*(s') ds ds'. \quad (6)
 \end{aligned}$$

where $P_0 = \frac{1}{2} y E_0^2$ and $B = \frac{1}{\sum \varphi^2 ds}$. The magnitude F , proportional to the square of the receiving antenna directional diagram, is:

$$\begin{aligned}
 F = B \sum \exp(-iks' \cos \psi) \varphi(s) ds = \sum \exp(i ks' \cos \psi) \varphi^*(s') ds' = \\
 = f_2(\theta, \varphi) f_2^*(0, \varphi) = f_2^2(\theta, \varphi). \quad (7)
 \end{aligned}$$

Card 3/5

On the problem of high-directional ...

26433
S/106/60/000/005/007/009
A055/A133

It is assumed that, in (6):

$$R_{os} = R_{o's} \approx R - R' \quad (8)$$

where R and R' represent, respectively, the distance between the antenna center M and the points O and O' of the scattering volume. This assumption is admissible since points O and O' are situated in the antenna Fraunhofer region. For the same reason, the term $\frac{1}{|S - S'|^2}$ was omitted in establishing (6). The following approximation is also possible in (6):

$$f_2(\gamma, \beta') = f_2(\alpha, \beta) \dots \quad (9)$$

Introducing the scatter diameter, we can write:

$$\begin{aligned} G(\gamma, \alpha) &= \operatorname{Re} \int \frac{\Delta \epsilon}{\epsilon} \left(\frac{\Delta \epsilon}{\epsilon} \right)^* e^{-ik[(R_o - R_{o'}) + (R - R')]} dv, \\ \text{and, using (7) - (9), we finally obtain:} \\ P_{ant} &= \frac{P_o k^4}{(4\pi)^3} \int \frac{f_1(\alpha, \beta)^2 f_2(\gamma, \delta)^2}{R_1^2 R_2^2} \times G(\theta) dv. \end{aligned} \quad (10)$$

Card 4/5

On the problem of high-directional ...

26433
S/106/60/000/005/007/009
A055/A133

It ensues from (10) and (2) that the antenna-gain drop can be interpreted as the result either of the decrease of the scattering volume or of the "de-correlation" of the field in the receiving antenna aperture. There are 1 figure and 4 references: 2 Soviet-bloc and 2 non-Soviet-bloc. The two references to English-language publications read as follows: Booker, de Bettencourt, "Theory of radio transmission by tropospheric scattering using very narrow beams". Proc. IRE., v. 43, no. 3, 281, 1955. Mellen, G. L.; Morrow, W. E.; Pote, A. J.; Radford, W. H.; Wiesner, J. B.; "UHF Long-range communication systems". Proc. IRE., v. 43, no. 10, 1269, 1955.

SUBMITTED: September 2, 1959

Card 5/5

3.1220
24.3700
9.5310

S/109/61/006/001/002/023
E140/E163

AUTHOR: Bakhareva, M.F.

TITLE: Cross-correlation of field fluctuations with finite receiving lens dimensions,

PERIODICAL: Radiotekhnika i elektronika, Vol.6, No.1, 1961, pp.9-13

TEXT: The author obtains the cross-correlation factor R for the field fluctuations at the foci of lenses with incident monochromatic and initially plane wave, traversing a layer of a medium with large-scale random inhomogeneities of the refractive index. It is shown that if the lens dimensions are comparable with the radius of cross-correlation of the field fluctuations, with increased distance between points of reception the coefficient R decreases more slowly in the presence of the lenses than in their absence. Acknowledgements are expressed to S.M. Rytov for his attention to the work. L.A. Chernov and M.N. Krom are mentioned for their contribution in this field. There are 4 figures and 3 Soviet references. JB

SUBMITTED: June 1, 1960

Card 1/1

6.9200

29309

S/109/61/006/010/006/027
D253/D302

AUTHOR: Bakhareva, M.F.

TITLE: Frequency correlation of fluctuations of amplitude
and phase utilizing a highly directional antenna

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 10, 1961,
1636 - 1644

TEXT: Analysis is given for correlation in propagation in non-uniform media. Formulae are sought expressing the dependence of the coefficients of frequency correlation of fluctuations of amplitude (R_A^x) and phase (R_p^x) at the focus of a lens antenna on the wave parameter $D = 4L/ka^2$, (where L is the thickness of the medium traversed, k is the wave number, and a is the mean dimension of the non-uniformity of the medium), on frequency difference δ , and on relative dimensions of receiving antenna, h/a . Field fluctuations are assumed small, and the antenna is a square of side h. Two plane

Card 1/5

29309

Frequency correlation of ...

S/109/61/006/010/006/027
D253/D302

waves of frequencies ω_1 and ω_2 are assumed. With fluctuations $\Delta A_{1,2}^x$ and $\Delta \varphi_{1,2}^x$ at the focus, R_A^Σ and R_φ^Σ are given by

$$R_A^\Sigma = \frac{\Delta A_1^\Sigma \Delta A_2^\Sigma}{\sqrt{(\Delta A_1^\Sigma)^2 (\Delta A_2^\Sigma)^2}}, \quad R_\varphi^\Sigma = \frac{\Delta \varphi_1^\Sigma \Delta \varphi_2^\Sigma}{\sqrt{(\Delta \varphi_1^\Sigma)^2 (\Delta \varphi_2^\Sigma)^2}}, \quad (1)$$

Fluctuations at the focus are taken to correspond with fluctuations in the incident waves. Frequency cross-correlation functions for amplitude and phase fluctuations at two points s and s', separated at a distance l in the plane of the receiving antenna are derived, making use of results obtained by L.A. Chernov (Ref. 5: Rasprostraneniye voln v srede so sluchaynymi neodnorodnostyami (Propagation of Waves in a Medium with Random Non-Uniformities) Izd. AN SSSR, 1958). In deriving the expressions for these functions two cases are distinguished, (1) in which $D\delta/(l - \delta)^2 \ll 1$, and (2) in which $D\delta/(l - \delta)^2 \gg 1$. The expressions obtained are respectively

Card 2/5

Frequency correlation of ...

CIA-309
S/109/61/006/010/006/027
D253/D302

$$\frac{\Delta A_1(s) \Delta A_1(s')}{A_0^2} = \frac{8}{3} \bar{\mu}^3 \sqrt{\pi} \left(\frac{L}{a}\right)^3 \exp\left(-\frac{n}{a^3}\right) \left(1 - 2 \frac{n}{a^3} + \frac{1}{2} \frac{n^2}{a^6}\right) \times \\ \times \left[1 - \frac{3}{8} \frac{1}{\left(\frac{L}{a}\right)^3} \frac{1}{1-\delta^3}\right], \quad (13)$$

$$\frac{\Delta \varphi_1(s) \Delta \varphi_1(s')}{\Delta \varphi_1(s) \Delta \varphi_1(s')} = \bar{\mu}^3 \sqrt{\pi} a L \frac{\omega^3}{c^3} \exp\left(-\frac{n}{a^3}\right) (1 - \delta^3).$$

and

$$\frac{\Delta A_1(s) \Delta A_2(s')}{\Delta \varphi_1(s) \Delta \varphi_2(s')} \left\{ \dots \right\} = 1' \bar{\pi} \left(\frac{a \omega}{2c}\right)^3 \bar{\mu}^3 (1 - \delta^3)^2 \left[\frac{\pi}{2} \left(\frac{1}{\delta} \mp 1\right) - \frac{n}{a^3} \frac{(1-\delta^3)(1+\delta^3)}{D\delta^3} \right]. \quad (15)$$

where μ is the refractive index at a point in the non-uniform medium, and A_0 is the amplitude incident on the layer. The coefficients of frequency correlation are then calculated, involving integration of the expressions found for the frequency cross-correlation functions over the area of the antenna. Two cases are again distinguished. (1) $D/(1 - \delta^2) \ll 1$ and (2) $D\delta/(1 - \delta^2) \gg 1$. The

Card 3/5

29309
S/109/61/006/u10/006/027
D253/D302

Frequency correlation of ...

result for the first case is

$$\begin{aligned} R_A^{\Sigma} &= 1 - \frac{3}{8} \frac{1}{\left(\frac{L}{a}\right)^2} \frac{1}{1 - \delta^2}, \\ R_{\varphi}^{\Sigma} &= \frac{1 - \frac{3}{8} \frac{1}{\left(\frac{L}{a}\right)^2}}{1 - \frac{3}{8} \frac{1}{\left(\frac{L}{a}\right)^2}}, \end{aligned} \quad (16) \quad +$$

indicating that in this case the coefficients do not depend on the dimensions of the focusing structure and fluctuations of phase are completely correlated. For the second case the final expressions are

$$\begin{aligned} \left. \begin{aligned} R_A^n \\ R_{\varphi}^n \end{aligned} \right\} &= \frac{(1 - \delta^2) \left[\frac{\pi}{2D} \left(\frac{1}{\delta} \mp 1 \right) - \frac{1}{3} \left(\frac{h}{a} \right)^3 \frac{(1 - \delta^2)(1 \mp \delta)}{D^4 \delta^4} \right]}{\left[Q_0 \left(\frac{h}{a} \right) \mp \frac{\pi}{2D} (1 - \delta) \pm \frac{1}{3} \left(\frac{h}{a} \right)^3 \frac{(1 - \delta)^2}{D^4} \right]^{1/4}} \times \\ &\quad \times \frac{1}{\left[Q_0 \left(\frac{h}{a} \right) \mp \frac{\pi}{D} (1 + \delta) \pm \frac{1}{3} \left(\frac{h}{a} \right)^3 \frac{(1 + \delta)^2}{D^4} \right]^{1/4}} \end{aligned} \quad (18)$$

Card 4/5

Frequency correlation of ...

27309
S/109/61/006/010/006/027
D253/D302

where $Q_0(\frac{h}{a}) = [\frac{h}{a} \Phi(\frac{h}{a}) + \frac{\exp(-\frac{h^2}{a^2}) - 1}{\sqrt{\pi}}]^2 \pi a^4$, and Φ is the probability integral.

In this case the coefficients depend on the dimensions of the receiving structure. The results show that with the increase of antenna dimensions or decrease of dimensions of non-uniformities, the correlation of amplitude and phase at the focus increases. Absolute intensities of fluctuations at the focus increase more slowly with antenna dimensions than the correlation functions. S.M. Rytov is thanked for discussions. There are 3 figures and 6 Soviet-bloc references. 4

SUBMITTED: December 28, 1960

Card 5/5

DOKHODA, V.I.
AED Nr: 980-6 31 May

NOISEPROOFING OF AMPLITUDE-KEYED SIGNALS AT FADING (USSR)

Bakhareva, M. F., and L. I. Byalyy. Radiotekhnika i elektronika, v. 8, no. 4, 1963, 539-545.

S/109/63/008/004/001/030

The noiseproofing of a receiver equipped with a limiter whose limiting level "follows up" the optimal signal-to-noise ratio (β) during the fading of keyed binary signals is examined theoretically. The calculation of an optimal limiting level and of the noiseproofing of reception with optimal regulation of the limiting level with (case I) or without (case II) fadings are presented and analyzed. The optimal limiting level, $U_{opt}(\beta, \kappa)$, is calculated and the dependence of U_{opt} on κ (where κ and $1 - \kappa$ are the transmission of "one" and "zero," respectively) in a region of medium values of β is noted. In an analysis of case I, calculations made for various values of β and κ demonstrate that the difference in values of the total error probability $P(\beta, U_{opt}, \kappa)$ is negative and that its absolute value is negligible. Therefore, the error probability is virtually independent of κ for $|\kappa - 1/2| \leq 0.1$. Calculations of noiseproof reception

Card 1/2

AII N. 500-0 31 May

NOISEPROOFING OF AMPLITUDE-KEYED [Cont'd]

S/109/63/008/004/001/030

in case II include estimation of the average error probability \bar{P} of a receiver with an optimal "follows-up" threshold level $U_{opt}(\beta, \alpha)$ for Rayleigh signal fading. The value of \bar{P} is calculated as a function of the average β on the receiver input. Comparison of these results with those in previous works in which the optimal limiting level was assumed constant demonstrates that optimal regulation in accordance with $U = U_{opt}(\beta, \alpha)$ provides a two- or threefold gain.

(GS)

Card 2/2

BAKHAREVA, M.F.; BYALYY, L.I.

Noiseproof feature of amplitude-keyed signals with fading.
Radiotekhnika i elektron. 8 no.4:539-545 Ap '63. (MIRA 16:4)
(Information theory)

1 21519-66 PH/ENR/1/TEC(1)-2/T/EMF(K)/EWA(h) IJP(c)
ACC NM: AP6003290

SOURCE CODE: UR/0109/66/011/003/0526/0531

AUTHOR: Gertsenshteyn, M. Ye.; Bakhareva, M. F.

49
B

ORG: none

TITLE: The problem of phase relations during amplification in an active medium

SOURCE: Radiotekhnika i elektronika, v. 11, no. 3, 1966, 526-531

TOPIC TAGS: laser, Raman laser, parametric amplification, nonlinear optics, maser

ABSTRACT: A theoretical analysis is made of the amplification of a weak light signal in an active medium. It is shown that in the linear approximation amplification of a weak signal in a two-level parametric medium and in three-level quantum media (including Raman lasers²⁶) can be described by the same dispersion equation. Conditions are established under which solutions of this equation correspond to one or the other type of amplification. Special cases of the amplification of transverse and longitudinal waves are considered. Orig. art. has: 16 formulas. [CS]

SUB CODE: 20/ SUBM DATE: 25Nov64/ ORIG REF: 009/ OTH REF: 010/ ATD PRESS *fmw*

Cord. 1/1 dde

UDC: 621.378.325.001

(Signature), A.E.

S/032/62/028/002/001/057
B101/B110

AUTHORS: Vigdergauz, M. S., Gol'bert, K. A., Savina, I. N., Afanasyev, M. I.,
Zimin, R. A., and Bakhareva, N. I.

TITLE: Chromatographic analysis of microimpurities consisting of
acetylene and diene compounds in complex hydrocarbon mixtures

PERIODICAL: Zavodskaya laboratoriya, v. 20, no. 2, 1962, 149 - 150

TEXT: A report is given on a method of chromatographic determination
of acetylene, propane diene, methyl acetylene, divinyl, and ethyl acetylene,
for the purpose of controlling the purification process of pyrogas or the
propane-propylene fraction. The analysis was conducted with an experimental
model of the XTP-2 (XnTP-2) chromatograph which was provided with a detector
for heat of combustion. Air served as carrier gas. Among the known
sorbents, none was found which permitted the determination of the peaks
of the dienes and alkynes to be ascertained. A system consisting of two
3 m long columns, diameter 4 mm, was, therefore, chosen. The first column
was filled with Inza brick powder (0.25 - 0.50 mm) soaked with 25%
diisobutyl phthalate. This column permitted the separation of hydrogen

Card 1/3

S/032/62/028/002/001/037

B101/B110

Chromatographic analysis of...

+ methane; ethane + ethylene; acetylene, propane, propylene, isobutane, propadiene, n-butane, isobutene + 1-butene + methyl acetylene; 2-butene, divinyl + ethyl acetylene. The second column was filled with brick powder soaked with 30% Sulfolane. It permitted the separation of methyl acetylene, divinyl, and ethyl acetylene. Operation is conducted first with column 1, and after passage of the propadiene peak, the columns are connected in series until the butane peak has passed. After this, the following substances are eluted from column 1 directly into the detector: 2-butene, divinyl, and ethyl acetylene. Subsequently, column 2 is reconnected, and separate elution of isobutene + 1-butene, and methyl acetylene takes place. To prevent burning through of the detector, the circuit must be switched off during elution of H₂, C₂H₆, C₂H₄, and C₃H₆.

When determining the content of divinyl and ethyl acetylene, the columns are connected in series after the peak methyl acetylene + isobutene + 1-butene. The accuracy of the analysis is 10%. The mean deviation with pyrogas is: 2% for acetylene; 6% for methyl acetylene; 13% for propadiene; 3% for divinyl; with the ethane-ethylene fraction: 5% for acetylene; 23% for propadiene. The apparatus was calibrated by means of synthetic mixtures. There are 1 figure and 1 table.

Card 2/3

Chromatographic analysis of...

S/032/62/028/002/001/037
B101/B110

ASSOCIATION: Novokuybyshevskiy filial instituta sinteticheskikh spirtov
i organiceskikh produktov (Novokuybyshevsk Branch of the
Institute of Synthetic Alcohols and Organic Products)

Card 3/3

BAKHAREVA, N.N., sanitarnyy vrach po kommunal'noy sanitarii

Improving the hygienic condition of the Tuzlov River. Gig.1 san.
25 no.8159-62 Ag '60. (MIRA 13:11)

1. Iz Novocherkasskoy gorodskoy sanitarno-epidemicheskoy stantsii.
(TUZLOV RIVER--WATER--POLLUTION)

OVCHINNIKOVA, L.V.; BAKDAREVA, N.V.

Phlogopite in the Lebyazh'ye deposit. Trudy Gor.-geol. inst.
UFAN SSSR no. 42:43-52 '59. (MIRA 14:2)
(Lebyazh'ye Mountain—Phlogopite)

BAKHAREVA, S. N.

BAKHAREVA, S. N. "The use in Selection of wild Types of Potatoes Resistant to the Colorado Beetle." All-Union Order of Lenin Academy of Agricultural Sciences imeni V. I. Lenin. All-Union Sci Res Inst of Plant Growing. Leningrad, 1956.
(For the Degree of Candidate in Agricultural Science)

So: Knichnaya Letopis' No. 18, 1956

BAKHAREVA, V.P.; DRYNOVA, I.A.

Dull finishing of furniture with lacquer flow-coating machines.
Der.prom. 11 no.10:17-18 O '62. (MIRA 15:9)
(Furniture) (Wood finishing)

SEARCHED
INDEXED

ABSTRACT: Appendix to a paper by J. R. Dugdale, "The absorption of strontium-90 by bone."

ABSTRACT: A brief account of the absorption of strontium-90 by bone.

ABSTRACT: A brief account of the absorption of strontium-90 by bone.

TOPIC TAGS: strontium-90, radioisotope, calcium, bone, half-life, radioactivity

ABSTRACT: Swine received radiostronium with their rations. At 1, 4, 8, 16, 32, 48, 72, 96, 120, 144, 168, 192, 216, 240, 264, 288, 312, 336, 360, 384, 408, 432, 456, 480, 504, 528, 552, 576, 600, 624, 648, 672, 696, 720, 744, 768, 792, 816, 840, 864, 888, 912, 936, 960, 984, 1008, 1032, 1056, 1080, 1104, 1128, 1152, 1176, 1200, 1224, 1248, 1272, 1296, 1320, 1344, 1368, 1392, 1416, 1440, 1464, 1488, 1512, 1536, 1560, 1584, 1608, 1632, 1656, 1680, 1704, 1728, 1752, 1776, 1800, 1824, 1848, 1872, 1900, 1924, 1948, 1972, 2000, 2024, 2048, 2072, 2100, 2124, 2148, 2172, 2200, 2224, 2248, 2272, 2300, 2324, 2348, 2372, 2400, 2424, 2448, 2472, 2500, 2524, 2548, 2572, 2600, 2624, 2648, 2672, 2700, 2724, 2748, 2772, 2800, 2824, 2848, 2872, 2900, 2924, 2948, 2972, 3000, 3024, 3048, 3072, 3100, 3124, 3148, 3172, 3200, 3224, 3248, 3272, 3300, 3324, 3348, 3372, 3400, 3424, 3448, 3472, 3500, 3524, 3548, 3572, 3600, 3624, 3648, 3672, 3700, 3724, 3748, 3772, 3800, 3824, 3848, 3872, 3900, 3924, 3948, 3972, 4000, 4024, 4048, 4072, 4100, 4124, 4148, 4172, 4200, 4224, 4248, 4272, 4300, 4324, 4348, 4372, 4400, 4424, 4448, 4472, 4500, 4524, 4548, 4572, 4600, 4624, 4648, 4672, 4700, 4724, 4748, 4772, 4800, 4824, 4848, 4872, 4900, 4924, 4948, 4972, 5000, 5024, 5048, 5072, 5100, 5124, 5148, 5172, 5200, 5224, 5248, 5272, 5300, 5324, 5348, 5372, 5400, 5424, 5448, 5472, 5500, 5524, 5548, 5572, 5600, 5624, 5648, 5672, 5700, 5724, 5748, 5772, 5800, 5824, 5848, 5872, 5900, 5924, 5948, 5972, 6000, 6024, 6048, 6072, 6100, 6124, 6148, 6172, 6200, 6224, 6248, 6272, 6300, 6324, 6348, 6372, 6400, 6424, 6448, 6472, 6500, 6524, 6548, 6572, 6600, 6624, 6648, 6672, 6700, 6724, 6748, 6772, 6800, 6824, 6848, 6872, 6900, 6924, 6948, 6972, 7000, 7024, 7048, 7072, 7100, 7124, 7148, 7172, 7200, 7224, 7248, 7272, 7300, 7324, 7348, 7372, 7400, 7424, 7448, 7472, 7500, 7524, 7548, 7572, 7600, 7624, 7648, 7672, 7700, 7724, 7748, 7772, 7800, 7824, 7848, 7872, 7900, 7924, 7948, 7972, 8000, 8024, 8048, 8072, 8100, 8124, 8148, 8172, 8200, 8224, 8248, 8272, 8300, 8324, 8348, 8372, 8400, 8424, 8448, 8472, 8500, 8524, 8548, 8572, 8600, 8624, 8648, 8672, 8700, 8724, 8748, 8772, 8800, 8824, 8848, 8872, 8900, 8924, 8948, 8972, 9000, 9024, 9048, 9072, 9100, 9124, 9148, 9172, 9200, 9224, 9248, 9272, 9300, 9324, 9348, 9372, 9400, 9424, 9448, 9472, 9500, 9524, 9548, 9572, 9600, 9624, 9648, 9672, 9700, 9724, 9748, 9772, 9800, 9824, 9848, 9872, 9900, 9924, 9948, 9972, 10000, 10024, 10048, 10072, 10100, 10124, 10148, 10172, 10200, 10224, 10248, 10272, 10300, 10324, 10348, 10372, 10400, 10424, 10448, 10472, 10500, 10524, 10548, 10572, 10600, 10624, 10648, 10672, 10700, 10724, 10748, 10772, 10800, 10824, 10848, 10872, 10900, 10924, 10948, 10972, 11000, 11024, 11048, 11072, 11100, 11124, 11148, 11172, 11200, 11224, 11248, 11272, 11300, 11324, 11348, 11372, 11400, 11424, 11448, 11472, 11500, 11524, 11548, 11572, 11600, 11624, 11648, 11672, 11700, 11724, 11748, 11772, 11800, 11824, 11848, 11872, 11900, 11924, 11948, 11972, 12000, 12024, 12048, 12072, 12100, 12124, 12148, 12172, 12200, 12224, 12248, 12272, 12300, 12324, 12348, 12372, 12400, 12424, 12448, 12472, 12500, 12524, 12548, 12572, 12600, 12624, 12648, 12672, 12700, 12724, 12748, 12772, 12800, 12824, 12848, 12872, 12900, 12924, 12948, 12972, 13000, 13024, 13048, 13072, 13100, 13124, 13148, 13172, 13200, 13224, 13248, 13272, 13300, 13324, 13348, 13372, 13400, 13424, 13448, 13472, 13500, 13524, 13548, 13572, 13600, 13624, 13648, 13672, 13700, 13724, 13748, 13772, 13800, 13824, 13848, 13872, 13900, 13924, 13948, 13972, 14000, 14024, 14048, 14072, 14100, 14124, 14148, 14172, 14200, 14224, 14248, 14272, 14300, 14324, 14348, 14372, 14400, 14424, 14448, 14472, 14500, 14524, 14548, 14572, 14600, 14624, 14648, 14672, 14700, 14724, 14748, 14772, 14800, 14824, 14848, 14872, 14900, 14924, 14948, 14972, 15000, 15024, 15048, 15072, 15100, 15124, 15148, 15172, 15200, 15224, 15248, 15272, 15300, 15324, 15348, 15372, 15400, 15424, 15448, 15472, 15500, 15524, 15548, 15572, 15600, 15624, 15648, 15672, 15700, 15724, 15748, 15772, 15800, 15824, 15848, 15872, 15900, 15924, 15948, 15972, 16000, 16024, 16048, 16072, 16100, 16124, 16148, 16172, 16200, 16224, 16248, 16272, 16300, 16324, 16348, 16372, 16400, 16424, 16448, 16472, 16500, 16524, 16548, 16572, 16600, 16624, 16648, 16672, 16700, 16724, 16748, 16772, 16800, 16824, 16848, 16872, 16900, 16924, 16948, 16972, 17000, 17024, 17048, 17072, 17100, 17124, 17148, 17172, 17200, 17224, 17248, 17272, 17300, 17324, 17348, 17372, 17400, 17424, 17448, 17472, 17500, 17524, 17548, 17572, 17600, 17624, 17648, 17672, 17700, 17724, 17748, 17772, 17800, 17824, 17848, 17872, 17900, 17924, 17948, 17972, 18000, 18024, 18048, 18072, 18100, 18124, 18148, 18172, 18200, 18224, 18248, 18272, 18300, 18324, 18348, 18372, 18400, 18424, 18448, 18472, 18500, 18524, 18548, 18572, 18600, 18624, 18648, 18672, 18700, 18724, 18748, 18772, 18800, 18824, 18848, 18872, 18900, 18924, 18948, 18972, 19000, 19024, 19048, 19072, 19100, 19124, 19148, 19172, 19200, 19224, 19248, 19272, 19300, 19324, 19348, 19372, 19400, 19424, 19448, 19472, 19500, 19524, 19548, 19572, 19600, 19624, 19648, 19672, 19700, 19724, 19748, 19772, 19800, 19824, 19848, 19872, 19900, 19924, 19948, 19972, 20000, 20024, 20048, 20072, 20100, 20124, 20148, 20172, 20200, 20224, 20248, 20272, 20300, 20324, 20348, 20372, 20400, 20424, 20448, 20472, 20500, 20524, 20548, 20572, 20600, 20624, 20648, 20672, 20700, 20724, 20748, 20772, 20800, 20824, 20848, 20872, 20900, 20924, 20948, 20972, 21000, 21024, 21048, 21072, 21100, 21124, 21148, 21172, 21200, 21224, 21248, 21272, 21300, 21324, 21348, 21372, 21400, 21424, 21448, 21472, 21500, 21524, 21548, 21572, 21600, 21624, 21648, 21672, 21700, 21724, 21748, 21772, 21800, 21824, 21848, 21872, 21900, 21924, 21948, 21972, 22000, 22024, 22048, 22072, 22100, 22124, 22148, 22172, 22200, 22224, 22248, 22272, 22300, 22324, 22348, 22372, 22400, 22424, 22448, 22472, 22500, 22524, 22548, 22572, 22600, 22624, 22648, 22672, 22700, 22724, 22748, 22772, 22800, 22824, 22848, 22872, 22900, 22924, 22948, 22972, 23000, 23024, 23048, 23072, 23100, 23124, 23148, 23172, 23200, 23224, 23248, 23272, 23300, 23324, 23348, 23372, 23400, 23424, 23448, 23472, 23500, 23524, 23548, 23572, 23600, 23624, 23648, 23672, 23700, 23724, 23748, 23772, 23800, 23824, 23848, 23872, 23900, 23924, 23948, 23972, 24000, 24024, 24048, 24072, 24100, 24124, 24148, 24172, 24200, 24224, 24248, 24272, 24300, 24324, 24348, 24372, 24400, 24424, 24448, 24472, 24500, 24524, 24548, 24572, 24600, 24624, 24648, 24672, 24700, 24724, 24748, 24772, 24800, 24824, 24848, 24872, 24900, 24924, 24948, 24972, 25000, 25024, 25048, 25072, 25100, 25124, 25148, 25172, 25200, 25224, 25248, 25272, 25300, 25324, 25348, 25372, 25400, 25424, 25448, 25472, 25500, 25524, 25548, 25572, 25600, 25624, 25648, 25672, 25700, 25724, 25748, 25772, 25800, 25824, 25848, 25872, 25900, 25924, 25948, 25972, 26000, 26024, 26048, 26072, 26100, 26124, 26148, 26172, 26200, 26224, 26248, 26272, 26300, 26324, 26348, 26372, 26400, 26424, 26448, 26472, 26500, 26524, 26548, 26572, 26600, 26624, 26648, 26672, 26700, 26724, 26748, 26772, 26800, 26824, 26848, 26872, 26900, 26924, 26948, 26972, 27000, 27024, 27048, 27072, 27100, 27124, 27148, 27172, 27200, 27224, 27248, 27272, 27300, 27324, 27348, 27372, 27400, 27424, 27448, 27472, 27500, 27524, 27548, 27572, 27600, 27624, 27648, 27672, 27700, 27724, 27748, 27772, 27800, 27824, 27848, 27872, 27900, 27924, 27948, 27972, 28000, 28024, 28048, 28072, 28100, 28124, 28148, 28172, 28200, 28224, 28248, 28272, 28300, 28324, 28348, 28372, 28400, 28424, 28448, 28472, 28500, 28524, 28548, 28572, 28600, 28624, 28648, 28672, 28700, 28724, 28748, 28772, 28800, 28824, 28848, 28872, 28900, 28924, 28948, 28972, 29000, 29024, 29048, 29072, 29100, 29124, 29148, 29172, 29200, 29224, 29248, 29272, 29300, 29324, 29348, 29372, 29400, 29424, 29448, 29472, 29500, 29524, 29548, 29572, 29600, 29624, 29648, 29672, 29700, 29724, 29748, 29772, 29800, 29824, 29848, 29872, 29900, 29924, 29948, 29972, 30000, 30024, 30048, 30072, 30100, 30124, 30148, 30172, 30200, 30224, 30248, 30272, 30300, 30324, 30348, 30372, 30400, 30424, 30448, 30472, 30500, 30524, 30548, 30572, 30600, 30624, 30648, 30672, 30700, 30724, 30748, 30772, 30800, 30824, 30848, 30872, 30900, 30924, 30948, 30972, 31000, 31024, 31048, 31072, 31100, 31124, 31148, 31172, 31200, 31224, 31248, 31272, 31300, 31324, 31348, 31372, 31400, 31424, 31448, 31472, 31500, 31524, 31548, 31572, 31600, 31624, 31648, 31672, 31700, 31724, 31748, 31772, 31800, 31824, 31848, 31872, 31900, 31924, 31948, 31972, 32000, 32024, 32048, 32072, 32100, 32124, 32148, 32172, 32200, 32224, 32248, 32272, 32300, 32324, 32348, 32372, 32400, 32424, 32448, 32472, 32500, 32524, 32548, 32572, 32600, 32624, 32648, 32672, 32700, 32724, 32748, 32772, 32800, 32824, 32848, 32872, 32900, 32924, 32948, 32972, 33000, 33024, 33048, 33072, 33100, 33124, 33148, 33172, 33200, 33224, 33248, 33272, 33300, 33324, 33348, 33372, 33400, 33424, 33448, 33472, 33500, 33524, 33548, 33572, 33600, 33624, 33648, 33672, 33700, 33724, 33748, 33772, 33800, 33824, 33848, 33872, 33900, 33924, 33948, 33972, 34000, 34024, 34048, 34072, 34100, 34124, 34148, 34172, 34200, 34224, 34248, 34272, 34300, 34324, 34348, 34372, 34400, 34424, 34448, 34472, 34500, 34524, 34548, 34572, 34600, 34624, 34648, 34672, 34700, 34724, 34748, 34772, 34800, 34824, 34848, 34872, 34900, 34924, 34948, 34972, 35000, 35024, 35048, 35072, 35100, 35124, 35148, 35172, 35200, 35224, 35248, 35272, 35300, 35324, 35348, 35372, 35400, 35424, 35448, 35472, 35500, 35524, 35548, 35572, 35600, 35624, 35648, 35672, 35700, 35724, 35748, 35772, 35800, 35824, 35848, 35872, 35900, 35924, 35948, 35972, 36000, 36024, 36048, 36072, 36100, 36124, 36148, 36172, 36200, 36224, 36248, 36272, 36300, 36324, 36348, 36372, 36400, 36424, 36448, 36472, 36500, 36524, 36548, 36572, 36600, 36624, 36648, 36672, 36700, 36724, 36748, 36772, 36800, 36824, 36848, 36872, 36900, 36924, 36948, 36972, 37000, 37024, 37048, 37072, 37100, 37124, 37148, 37172, 37200, 37224, 37248, 37272, 37300, 37324, 37348, 37372, 37400, 37424, 37448, 37472, 37500, 37524, 37548, 37572, 37600, 37624, 37648, 37672, 37700, 37724, 37748, 37772, 37800, 37824, 37848, 37872, 37900, 37924, 37948, 37972, 38000, 38024, 38048, 38072, 38100, 38124, 38148, 38172, 38200, 38224, 38248, 38272, 38300, 38324, 38348, 38372, 38400, 38424, 38448, 38472, 38500, 38524, 38548, 38572, 38600, 38624, 38648, 38672, 38700, 38724, 38748, 38772, 38800, 38824, 38848, 38872, 38900, 38924, 38948, 38972, 39000, 39024, 39048, 39072, 39100, 39124, 39148, 39172, 39200, 39224, 39248, 39272, 39300, 39324, 39348, 39372, 39400, 39424, 39448, 39472, 39500, 39524, 39548, 39572, 39600, 39624, 39648, 39672, 39700, 39724, 39748, 39772, 39800, 39824, 39848, 39872, 39900, 39924, 39948, 39972, 40000, 40024, 40048, 40072, 40100, 40124, 40148, 40172, 40200, 40224, 40248, 40272, 40300, 40324, 40348, 40372, 40400, 40424, 40448, 40472, 40500, 40524, 40548, 40572, 40600, 40624, 40648, 40672, 40700, 40724, 40748, 40772, 40800,

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110008-7

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110008-7"

ACCESSION NR: A1500617

S70000/64/000/000/014270146

AUTHOR: Antonov, R. N.; Bakhareva, T. A.

TITLE: Accumulation of strontium-90 in cattle during the embryonal and post-

ABSTRACT: Following the addition of ⁹⁰Sr to the diet of cattle during the last few months of pregnancy, evidence of the radioisotope passed into the fetus. The

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110008-7

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110008-7"

BAKHAREVA, Z. I.
CA

The direct action of chloroplatin on the plants. V. V. Butkevich and Z. I. Bakhareva. *Vestn. Nauk.-Tekhn. Issledovani. Inst. Tadzhorsk. Agrobiologicheskogo Nauchno-Prakticheskogo Uprugolodostsi* 1939, No. 112; Akad. Nauk. Tadzh. SSR, 1940, No. 7, 47. On podzolized clay soils chloroplatin together with P-K fertilizers added during the vegetation of spring wheat had a slight stimulating effect; added before the vegetation period, it produced a considerable effect. In water cultures chloroplatin had a depressing effect. In sand cultures chloroplatin had a slight pos. effect. Chloroplatin decreased the sprouting of the seeds of cultivated plants and weeds.

W. K. Henn

APPENDIX A METALLURGICAL LITERATURE CLASSIFICATION

BAKHAREVA, Z.I.

629

Soil acidity as a factor determining the occurrence of inactive Azotobacter in the soil. II. Experimental induction of inactive forms of Azotobacter. I. N. Mishustin and Z. I. Bakhareva. Biotechnology 11, N. S. R. V. B. Inst. T. I. Krasik. 1971. 25(1971), p. 1-4. 70X50 mm.
Azotobacter (I) is inactivated at pH 4.5. After a few days in acid soil I does not develop on gel media but colonies appear on soil plates contg. N compounds. Prolonged culturing on a magnitrol medium partially restores the N-fixing capacity of I.

T. Esman

1958-1964 METALLURGICAL LITERATURE CLASSIFICATION

SEARCHED INDEXED
1958-1964

SEARCHED INDEXED

~~SAKAMOTO KEIJI "S. K."~~ PRODUCTION AND DISTRIBUTION RIGHTS

The reaction between dichlorodiphenylmethane and acid anhydrides. Z. Bakhshayev, Likhny Zapiski Akademii Nauk SSSR, 1958, im. V. I. Ul'yanova-Lenina 101, No. 3. Norm Stroederschmid Rabat No. 3, 64 (1944). - Ph₂CCl₂ and BaNH₂ heated at 130-140° give PhC≡N and Ph₂CO.

H. M. Lebesgue

10

100-000 GENERAL LITERATURE CLASSIFICATION

1977-1978

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000103110008-7"

CA BAKHAREVA, Z.I.

12

The role of frost in the annual cycle of the structural condition of the soil. I. N. Brasukov and Z. I. Bakhareva. Pedology. U.S.S.R., 1950, No. 1, 21-31. Samples of garden soil (contg. 21.4% H₂O) were submitted to several systems of freezing: (1) frozen once for 7 days; (2) frozen twice, with a 3-day interval after the first freezing, and the second freezing period lasting only 3 days; (3) frozen 3 times, with two 3-day intervals between. After freezing, the samples were dried at 40, 60, and 105 °C. The moisture retained at these temps shows that the single freezing imparts a higher hydrophilic property to the soil and increases its active surface. The lowering of the f.p. after freezing the soil, 2 or 3 times, is explained on the basis of microbial activity causing the release of electrolytes, such as exchangeable Al. - U.S. 1

7- LUDVÍK VÍTĚZLAV H.A.

22

Safety explosives for sulfur mines. L. V. Dubnov and N. S. Bakhmetrich. *Gorod Zaporizhia*, 1950, No. 12, 20-2. A no. of flame attenuators were tested for use with ammonite #8 in mines where there is danger of S explosions. The explosion temp. of ammonite #8 is 1750° which is considerably higher than the explosive temp. of S dust (275-300°). Of the substances tried best results gave NH₄Cl, gelatinized (with agar-agar) H₂O, and NaNO₃ 10H₂O. NaCl was ineffective. Other substances were only moderately so. Mixing the flame attenuator with the explosive was more effective than using it as an outer layer. On the basis of these results 2 explosives were compounded for use in S-endangered mines. Both proved safe in lab. and mine tests.

M. Hesch

~~BAKHALEVICH, N.S.~~, kandidat tekhnicheskikh nauk; DUBOV, L.V., kandidat
tekhnicheskikh nauk.

Explosives used in mines subject to gas and dust outbursts. Besop.
truda v prom. 1 no.1:28-30 Ja '57. (MLRA 10:4)
(Mine gases) (Explosives)

~~BACHAREVICH, N.S.~~, kandidat tekhnicheskikh nauk; VASIL'YEVA, V.S.,
inzhener; DUBNOV, L.V., kandidat tekhnicheskikh nauk.

Charges in safety sheathings. Ugol' 32 no.4:25-27 Ap '57.
(MLRA 10:5)
(Explosives--Safety measures)

BAKHAREVICH, M.S., kand.tekhn.nauk

High-safety explosives. Besop.truda v prom. 3 no.5:25-26
Mg '59. (MIRA 12:8)
(Explosives--Safety measures)

BAKHAREVICH, N.S., kand.tekhn.nauk; VASIL'YEVA, V.S., inzh.

High-safety explosives for the coal industry. Vzryv.delo no.44/1:
78-92 '60. (MIRA 13:7)
(Coal mines and mining--Explosives)

DUBNOV, L.V., doktor tekhn.nauk; BAKHAREVICH, N.S., kand.tekhn.nauk;
VASIL'YEVA, V.S., inzh.

Experimental investigation of the inflammability of methane-air
mixtures under the effect of explosions. Vzryv.delo no.44/1:
90-122 '60. (MIRA 13:7)

(Blasting--Safety measures)
(Mine gases)

KOLESNICHENKO, I.T.; BAKHAREVICH, N.S.; ALEKSANDROV, V.Ye.; SEVRIKOV,
V.V.

Using the E-6 explosive in Donets Basin mines. Varyv. delo
no.55/12:126-131 '64. (MIRA 17:10)

1. Meshduvedomstvennaya komissiya po varyvnому delu.

BAKHAREVICH, N.S.

Sensitization of ammonia permisibles with liquid nitroethyle.
Varyv. delo no.52/9:189-195 '63. (MIRA 17:12)

1. Mezhdovedomstvennaya komissiya po varyvnomu delu.

BAKHAREVICH, N.S.; VASIL'YEVA, V.S.

Flame quenching properties of aqueous gels. Vzryv. delo
no.52/9;192-195 '63. (MIRA 17:12)

1. Mezhdovedomstvennaya komissiya po vzryvnому delu.

BAKHAREVICH, V.D., podpolkovnik meditsinskoy sluzhby

Pneumatic atomizer. Voen.-med.zhur. no.7:76 Jl '56. (MLRA 9:11)
(SPRAYING AND DUSTING EQUIPMENT)

PUZYREV, N.N.; BAKHAREVSKAYA, T.M.

Some data on the study of conditions for exciting transverse waves.
Trudy Inst. geol. i geofiz. Sib. otd. AN SSSR no.16:182-200 '62.
(MIRA 16:9)
(Shock waves)

BAKHAREVSKAYA, S.L. (Kuntsevo)

Design of secondary vertical sedimentation tanks. Vod.i
san.tekh. no.9:27-30 S '59. (MIRA 12:12)
(Sewage--Purification)

KARZHEVA, L.V.; PUZYREV, N.N.; Prinimali uchastiye: VINOGRADOV, F.V.;
BRODOV, L.Yu.; LANTSOV, I.A.; KHUDOBINA, L.N.; BAKHAREVSKAYA, T.M.

Experimental study of head transverse waves. Trudy Inst. geol.
i geofiz. Sib. otd. AN SSSR no.16:64-94 '62. (MIRA 16:9)
(Seismic waves)

BAKHAREVSKAYA, Y.S.N.

Results of treating experimental diphtheria with preparation
607. Nauch. trudy Kaz.gos.med.inst. 14:95-96 '64.

(MIRA 18:9)

1. Kafedra detskikh infektsiy (zav. - prof. N.P.Kudryavtseva)
Kazanskogo meditsinskogo instituta.

BAKHAREVSKIY, S.L.

Hydraulic calculation of secondary vertical clarifiers. Vod. i
san. tekhn. no.10:27-30 O '58. (MIRA 11:10)
(Water--Purification) (Filters and filtration)

~~MAKAROVSKY~~ ~~1965~~ ~~1965~~; KOKS, V.A., Inventor.

Mineralization of the chain feed in a rotary kiln. Element 31 no.2:
(MIRA 1818)
1965-04-19

1. Предприятие "ТСервисон" Московского областного народного хозяйства.

KEPOMYASHCHIY, N.I., inzhener; BAKHAREVSKIY, V.A., inzhener.

Organizing assembly work in rebuilding 127-m. rotary kilns. Cement 22
no.1:12-15 Ja-Y '56. (MLRA 9:6)
(Kilns, Rotary)

ZNIKIN, P.F.; BAKHAREVSKIY, V.A.

Ways to improve repair in the cement industry. TSement 28
no.4:3-4 Jl-Ag '62. (MIRA 15:7)

1. "TSomromont", Moskva.
(Cement plants) (Repairing)

BALCHAREVSKIY, V.P. (Moskva); UTEVSKIY, A.M. (Moskva).

Examination of two-step forced commutation circuits used in inverters.
Izv. AN SSSR Otd.tekh.nauk no.3:15-27 Mr '56. (MIRA 9:?)
(Electric current converters)

BAKHAREVSKIY V. P.

-845)

Translation from: Referativnyy zhurnal. Elektrotehnika, Sov/112-59-3-5058
AUTHOR: Myl'nikov, N. N., Bakharevskiy, V. P., and Shishlo, K. S.
TITLE: Electrical Drive on New Cotton Printing Machines
(Elektroprivod novykh pechatnykh mashin)
PERIODICAL: Izv. vyash. uchebn. zavedeniy. Tekhnol. tekstil'n. prom-sti,
1958, Nr 1, pp 157-168
1955); (2) a generator-motor-scheme drive with a DC motor (made by
the Ivanovo textile finishing plants are compared: (1) a drive with a 3-phase
doubly-fed commutator motor with a regulating transformer (Czechoslovak
make, 1955); (2) a generator-motor-scheme drive with a DC motor (made by
the Shcherbakov Plant of Polygraphic Machines). The full range 1:11 of speed
regulation is attained in the first type by means of an additional adjustable
speed reducer. A comparison shows that the generator-motor-type drive has
the advantages over the 3-phase commutator-motor drive in controllability.

SOV/112-59-3-5058

8(5)

Electrical Drive on New Cotton Printing Machines

higher speed, and lower electric-energy consumption per unit production. It is noted that the generator-motor scheme can be simplified for the operating duty in question. Both schemes and energy characteristics of the drives are presented.

L. Ya. L.

Card 2/2

BAKHAROV, V.M., inzhener.

New Lincrusta wallpaper used on passenger ships being built in the
German Democratic Republic. Rech. transp. 16 no.4:37-38 Ap '57.

(Germany, East--Shipbuilding) (Lincrusta-Walton) (MLRA 10:5)

A. BAKHAROVSKIY, G. Ya.

PHASE X

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 687 - X

BOOK

Authors: SHERESHEVSKIY, A. I., UNANYANIS, T. P., BAKHAROVSKIY, G. Ya., Compilers
Full Title: CHEMICAL GOODS. Reference Book.

Transliterated Title: Khimicheskiye tovary. Spravochnik.

PUBLISHING DATA

Originating Agency: None

Publishing House: State Scientific and Technical Publishing House of Chemical Literature ("Gosknimizdat")
Date: 1954 No. pp.: 1028

No. of copies: 25000

Editorial Staff

Editor: Molotkov, I. G.

Contributing editors: Degtyarev, A. N.,
Mitropol'skiy, I. S., Orlov, V. I., Khan-Murzina, N. A., Orekhova, O. F.,
Belovitskiy, A. A., Rokhlin, M. I., Revyakin, A. A., Yasinskiy, B. N.,

Strokina, A. I., Kaplun, T. S., Smolyakova, M. I., Al'tman, A. A., Petrov, I. P.

PURPOSE AND EVALUATION: This reference book is intended for a wide range of workers in all
branches of industry and agriculture who use chemical products. It is written in a
clear language. The division of the material into groups and subdivisions, makes
any one item easy to locate.

KNUNYANTS, I.L., glav. red.; BAKHAROVSKIY, G.Ya., zam. glav. red.;
BUSEV, A.I., red.; VARSHAVSKIY, Ya.M., red.; GEL'PERIN,
N.I., red.; DOLIN, P.I., red.; KIREYEV, V.A., red.; MEYERSON,
G.A., red.; MURIN, A.N., red.; POGODIN, S.A., red.; REBINDER,
P.A., red.; SLONIMSKIY, G.S., red.; STEPANENKO, B.N., red.;
EPSHTKIN, D.A., red.; VASKEVICH, D.N., nauchnyy red.; GALLE,
R.R., nauchnyy red.; GARKOVENKO, R.V., nauchnyy red.; GODIN,
Z.I., nauchnyy red.; MOSTOVENKO, N.P., nauchnyy red.;
LEBEDEVA, V.A., mladshiy red.; TRUKHANOVA, M.Ye., mladshiy
red.; FILIPPOVA, K.V., mladshiy red.; ZHAROVA, Ye.I., red.;
KULIDZHANOVA, I.D., tekhn. red.

[Concise chemical encyclopedia] Kratkaya khimicheskaya entsiklo-
pediya. Red. koll.: I.L.Knuniants i dr. Moskva, Gos. nauchn.
izd-vo "Sovetskaia entsiklopedia." Vol.1. A - E. 1961.
1262 columns.

(MIRA 15:2)

(Chemistry---Dictionaries)

KHUNYANTS, I.L., glav. red.; BAKHAROVSKIY, R.Ya., zam. glav. red.;
VASKEVICH, D.N., nauchn. red.; VONSKIY, Ye.V., nauchn.
red.; GALLE, R.R., nauchn. red.; GODIN, Z.I., nauchn. red.
MOSTOVENKO, N.P., nauchn. red.; TRUKHANOVA, M.Ye., red.

[Concise chemical encyclopedia] Kratkaia khimicheskaiia
entsiklopediia. Moskva, Sovetskaia Entsiklopediia.
Vol.4. 1965. 1182 columns. (MIRA 18:7)

VEYSFYSKAYA, N.D.; BABUSHKINA, T.V.; BAKHAYEV, A.K.; GRISHUTIN, Yu.P.

Effect of aldehydes on the rate of polymerization of butadiene
and methyl styrene. Kauch. i rez. 24 no.8:51 '65.

1. Karagandinskiy zavod sinteticheskogo kauchuka.
(MIRA 18:10)

Secondary quinones inhibit the polymerization of butadiene, the effects of different amounts of phenol in α -methylstyrene on the kinetic process of copolymerization of butadiene and α -methylstyrene.

The results show that the inhibition process has essentially stopped. Orig. art. has 1 table.

BAKHAYEV, N.; ZHELUDKOV, N. brigadir betonshchikov; ZABIRKO, N.;
MIKHAYLOVSKIY, P.; TRET'YACHENKO, B.

Surprise inspection by worker-correspondents of the All-Union Central
Council of Trade Union periodical "Okrana truda i sotsial'noe strakh-
vaniye": Just a job or duty? Okhr. truda i sots. strakh. 3 no.8;50-
54 Ag '60.
(MIRA 13:9)

1. Rukovoditel' kompleksnoy brigady kommunisticheskogo truda upravleniya
"Domenstroy" tresta "Kazmetallurgstroy," Karaganda (for Bakhayev).
2. Zhelezobetonnyy zavod No.1 kombinata "Karagandashakhtostroy"
(for Zheludkov). 3. Korrespondent gazety "Sotsialisticheskaya
Karaganda" (for Zabirko). 4. Tekhnicheskiy inspektor oblisovprofa,
Karaganda (for Mikhaylovskiy). 5. Spetsial'nyy korrespondent zhurnala
"Okrana truda i sotsial'noye strakhovaniye," Karaganda (for Tret'-
yachenko).

(Karaganda Basin--Coal mines and mining--Safety measures;

S/263/62/000/011/002/022
I007/I207

AUTHOR: Grinman, I. G., Ovrov, Yu. V., Mishchenko, V.S. and Bakhayev, Sh.

TITLE: Photoelectric micrometer for measuring the diameter (gage) of moving wire or threads

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 32. Izmeritel'naya tekhnika, no. 11, 1962, 13, abstract 32.11.80. "Tr. In-ta yadern. fiz. AN KazSSR", no. 4, 1961, 138-146

TEXT: Contactless devices of the shadow, pulse, pneumatic and induction type for measuring wire diameters during drawing are described, and shortcomings when used under plant conditions are revealed. Attention is drawn to a new improved measuring device — the photoelectric micrometer designed at the Institut Yadernoy fiziki AN KazSSR (Institute for Nuclear Physics of the AS, KazSSR). This micrometer consists of a combined optical-mechanical projection system with an electronic follow-up device. The image of the wire, illuminated by a light beam, is focused on a screen provided with slots that are located parallel to the image in the center of the upper (top) and lower edges of the screen. Two photomultipliers, mounted behind the screen receive light pulses that pass through the slots and transform them into voltage pulses. The actual result of measurements is determined from the coincidence of the pulse front-lines. Detailed description is given of the electronic circuit specially designed for this device. Results of laboratory tests of the new micrometer are reported. There are 5 figures and 3 references.

[Abstracter's note: Complete translation.]

Card 1/1

KHAYEVA, A. B., MIKULIN, M. A., ZAGNIKORDOVA, E. N. and ZAYTSEVA, V. I.

""Plague Infection in Gerbille Fleas in Western Turkmenia in 1953-55,"
A REPORT PRESENTED at a Joint Conf. on Problems of Natural Homes and Epidemiology
of Highly Infectious Diseases, 25 Jan to 2 Feb 1957 at the State Inst. of
Microbiology and Epidemiology of the SE USSR.

BAKHAYEVA, A.V.

Acarids in Turkmenistan. Izv.AN Turk.SSR.Ser.biol.nauk no.5:72..
79 '62. (MIRA 15:11)

1. Turkmeneskaya protivochumnaya stantsiya.
(TURKMENISTAN--ACARINA)

ANGELOV, St., Akad.; KUIUNDZHIEV, Il., D-r.; GULUBOV, S., D-r.; NIKOLOV, P., D-r.;
RAKHCHIVANOV, Avg., D-r.

Spread of Q-fever among slaughter-house workers in Bulgaria. Izv. Mikrob.
inst., Sofia no.8:29-34 1957,

(Q FEVER, epidemiol,

in slaughter-house workers in Bulgaria)
(SLAUGHTERING AND SLAUGHTERHOUSES

Q-fever in slaughterhouse workers in Bulgaria (Bul))

L 21335-6

EWT(e)/EWT'(e) 100%

TITLE: Study of isotope effects during dissociation of carbon dioxide in a glow
electrical discharge

ABSTRACT: Isotope exchange during dissociation of carbon dioxide in a glow
discharge was investigated. To determine the effect of isotope enrichment in the
gas as a function of experimental conditions, the ratio of the rate of dissociation of
isotopically enriched carbon dioxide to that of normal carbon dioxide was measured
by mass spectrometric methods.

... to 50 mm the degree of dissociation of CO₂ increases from 0.1 to 0.25. This is due to the fact that the partial pressure of CO₂ is reduced by 50% and the partial pressure of O₂ is increased by 50%.

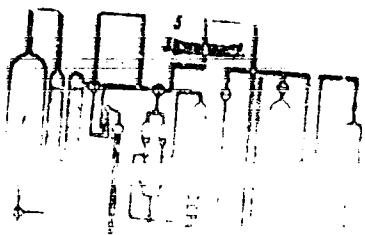
"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110008-7

Card 3/4

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110008-7"

L 11125-65
ACCESSION NB: AP4044448

ENCLOSURE, 01



1 receiving reservoir, 2 drying towers, 3 flow meter, 4 filter
5 6 mercury manometer, 7 pump, 8 air compressor, 9 air pipe, 10 air pipe
11 air pipe, 12 air pipe, 13 air pipe, 14 air pipe, 15 air pipe, 16 air pipe

Car 4, 4

SUCHILIN, A.; BAKHCHISARAYTSEV, A.

Introduce technical production standards in mining works. Sets.
trud 5 no.2:83-86 F '60. (MIRA 13:6)
(Mining engineering--Production standards)

BAKHCHISARAYTSEV, Arutyun Nikolayevich; IVANIN, P.D., redaktor; NIKOLAEV,
S.V., redaktor; SUCHILIN, A.P., redaktor; SKVORTSOV, V.P., redaktor
izdatel'stva; SERGEEVA, N.A., redaktor izdatel'stva; KRYNOCHKINA,
K.V., tekhnicheskiy redaktor

[Organizing and planning geological prospecting] Organizatsiya i
planirovaniye geologo-rasvedochnykh rabot. Pod red. P.D.Ivanina,
S.V.Nikolaeva. A.P.Suchilina. Moskva. Gos. nauchno-tekhn. izd-vo
lit-ry po geol. i okhrane nedor. 1956. 283 p.
(Geology) (Prospecting) (MIRA 9:8)

BAIKHISARAY TSMV, A.N.

Method for determining classes of rocks when drilling holes
using hand perforators. Trudy Arn.geol.upr. no.1:147-164
'57.

(Boring) (Rocks--Classification and nomenclature)
(MIRA 12:1)

BAKHCHISRAYTSOV, A.N.

Equipment for rock category determination by their resistance to
drilling. Biul. TSIN tevet. met. no. 24:7-8 '57. (MIRA 11:5)
(Rocks—Testing) (Boring)

SOV/118-58-11-7/19

AUTHORS: Mndzhoyan, K.A. and Bakhchisaraytsev, A.N., Engineers

TITLE: An Apparatus for the Determination of Rock Categories with Respect to Their Drilling Resistance (Ustanovka dlya opredeleniya kategorii gornykh porod po burimosti)

PERIODICAL: Mekhanizatsiya trudoyemkikh i tyazhelykh rabot, 1958, Nr 11, p 24 (USSR)

ABSTRACT: The authors recommend a special device of the type OB-2 for the quick determination (from 15 to 40 minutes) of the drilling resistance of rocks (neither the designers nor the manufacturing plant are mentioned). The drilling machine records automatically the speed of drilling in centimeters per minute, and the angle of inclination of the drill. There are 1 photograph and 1 table.

1. Rock--Mechanical properties 2. Rock--Testing equipment
3. Drilling machines--Performance 4. Recording devices
--Performance

Card 1/1

PAPENCOL'TS, K.N.; MALKHASIAN, E.O.; AVAKYAN, L.A.; BAKHCHISARAYTSEV, A.N.

In memory of O.S. Stepanian. Izv. AN Arm. SSR. Geol. i geoz.
nauki 13 no.3/4;137-139 '60. (MIRA 13:9)
(Stepanian, Oganes Stpanovich, 1902-1950)

BAKHCHISARAYTSEV, Arutyun Nikolayevich; KULICHIKHIN, N.I., red.;
KRYZHANOVSKIY, V.A., red.izd-va; GUROVA, O.A., tekhn. red.

[Classification of rocks and industrial standards for
hole boring] Klassifikatsii gornykh porod i tekhnicheskie
normy vyrabotki na burenie shpurov. Moskva, Gosgeoltekhn-
izdat, 134 p. (MIRA 16:12)
(Boring) (Rocks--Classification)